

- 1 1. A method comprising:
2 displaying an image using a second order non-
3 linear electro-optic effect.
- 1 2. The method of claim 1 including forming an imager
2 for a high end large screen rear projection high definition
3 television.
- 1 3. The method of claim 1 including forming an imager
2 for a front-projection system.
- 1 4. The method of claim 1 including forming a second
2 order non-linear electro-optic film over a substrate.
- 1 5. The method of claim 4 including forming
2 transistors in said substrate.
- 1 6. The method of claim 5 wherein forming transistors
2 includes forming memory transistors and drive transistors
3 in said substrate.
- 1 7. The method of claim 2 including forming a thermal
2 interface material over a support structure and forming
3 said substrate over said thermal interface material.

1 8. The method of claim 7 including forming said film
2 of a second order electro-optic material having a switching
3 speed on the order of at least one gigaHertz.

1 9. The method of claim 8 including forming said film
2 of an electro-optic material having a switching speed of
3 greater than 100 gigaHertz.

1 10. The method of claim 9 including forming said film
2 of a stilbene-based organic molecular salt.

1 11. The method of claim 10 including forming said
2 film of 4'-dimethylamino-N-methyl-4-stilbazolium tosylate.

1 12. An imager comprising:
2 a second order non-linear electro-optic film.

1 13. The imager of claim 12 including a support
2 structure covered by a thermal interface material and a
3 substrate over said support structure.

1 14. The imager of claim 13 including transistors
2 formed in said substrate.

1 15. The imager of claim 14 including drive
2 transistors and memory transistors in said substrate.

1 16. The imager of claim 12 wherein said film has a
2 switching speed of at least one gigaHertz.

1 17. The imager of claim 16 wherein said film has a
2 switching speed of greater than 100 gigaHertz.

1 18. The imager of claim 12 wherein said film includes
2 a stilbene-based organic molecular salt.

1 19. The imager of claim 18 wherein said film includes
2 4'-dimethylamino-N-methyl-4-stilbazolium tosylate.

1 20. A system comprising:
2 a processor; and
3 an imager coupled to said processor, said imager
4 including a second order non-linear electro-optic effect
5 film.

1 21. The system of claim 20 including a support
2 structure covered by a thermal interface material and a
3 substrate over said support structure.

1 22. The system of claim 21 including transistors
2 formed in said substrate.

1 23. The system of claim 22 including drive
2 transistors and memory transistors in said substrate.

1 24. The system of claim 20 wherein said film has a
2 switching speed of at least one gigaHertz.

1 25. The system of claim 24 wherein said film has a
2 switching speed of greater than 100 gigaHertz.

1 26. The system of claim 20 wherein said film includes
2 a stilbene-based organic molecular salt.

1 27. The system of claim 26 wherein said film includes
2 4'-dimethylamino-N-methyl-4-stilbazolium tosylate.

1 28. The system of claim 19 wherein in said system
2 includes a front projection display system.